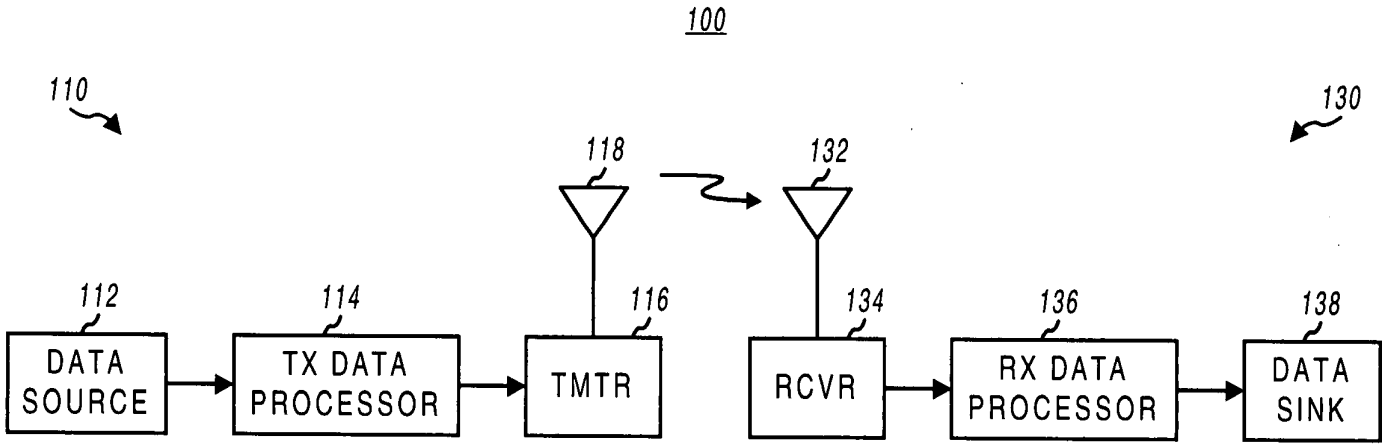


FIG. 1

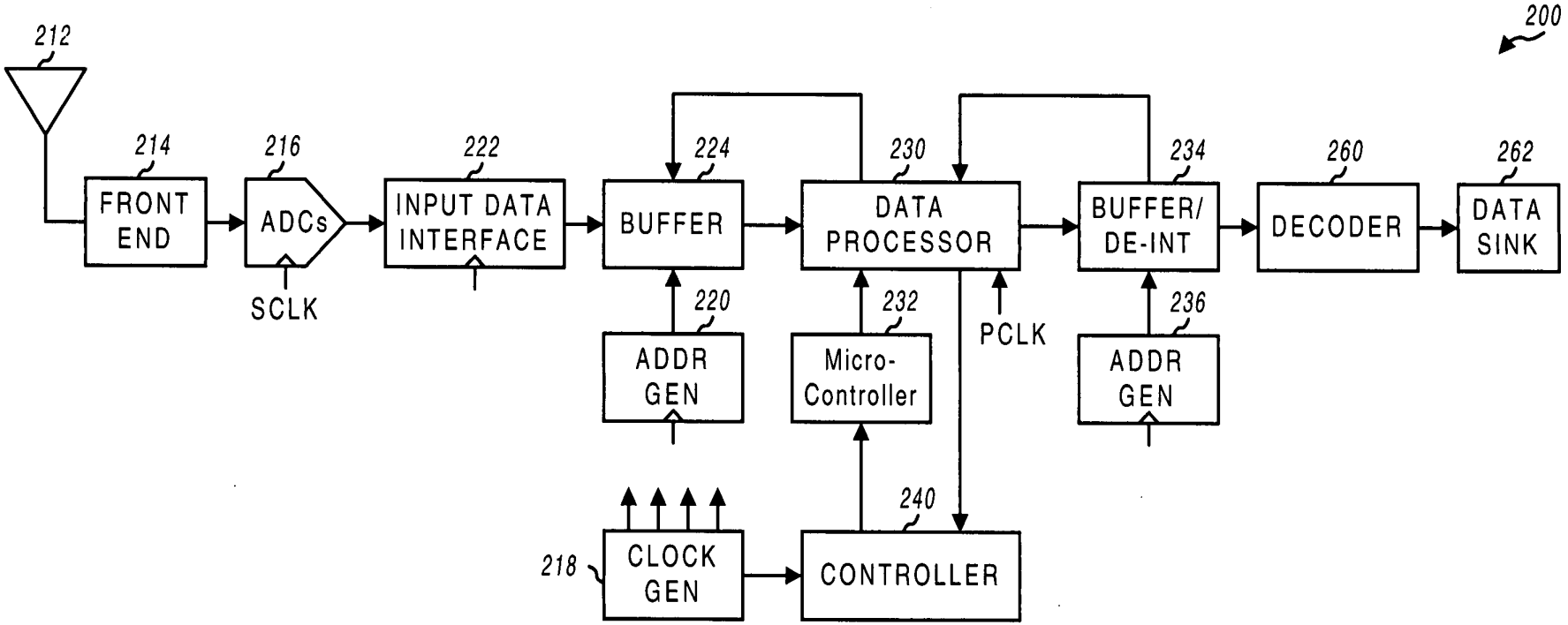


FIG. 2

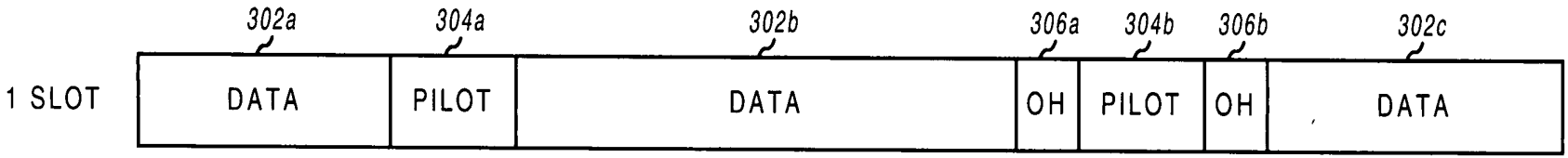


FIG. 3

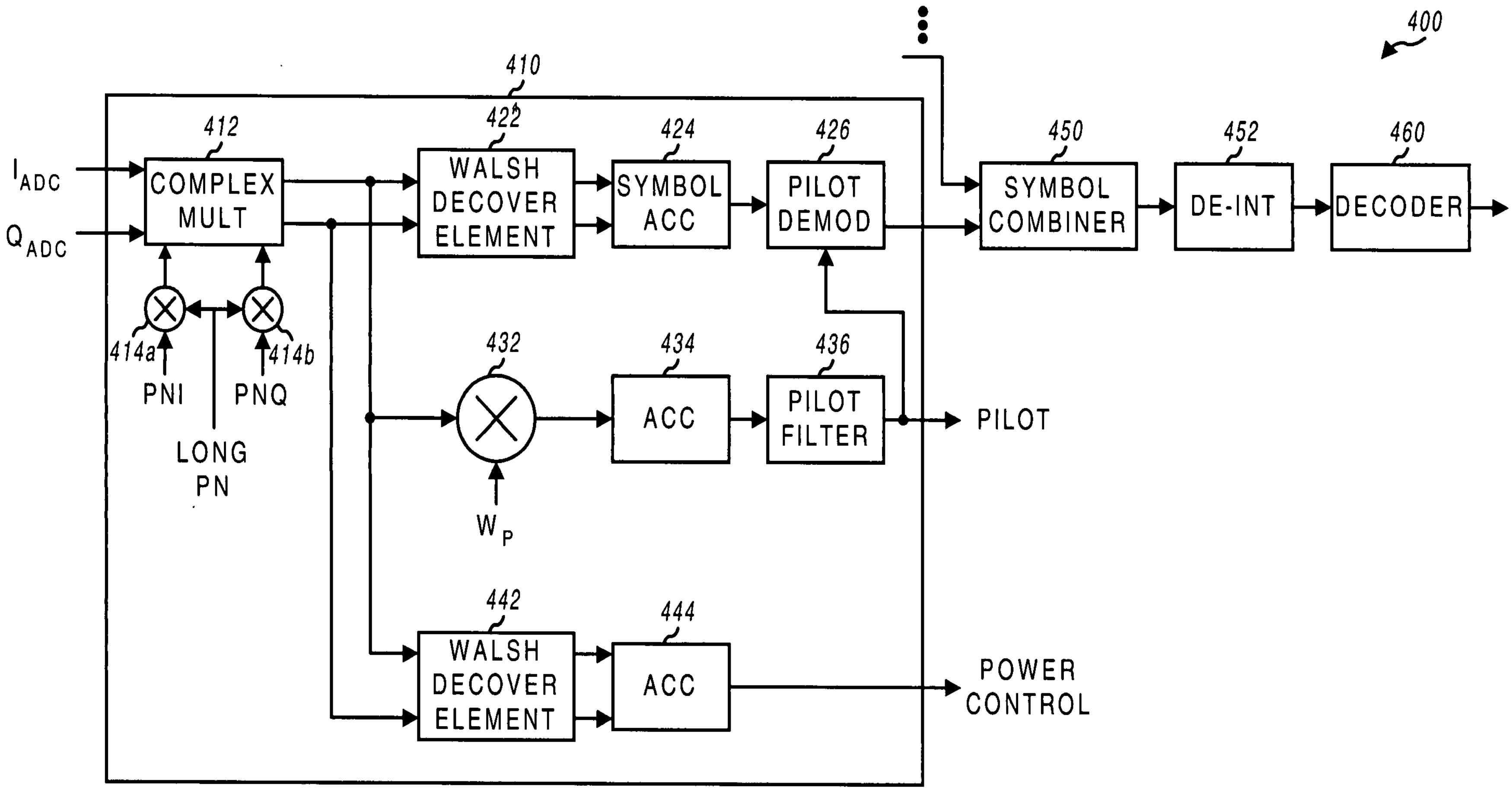

400
410
412
COMPLEX MULT
I_{ADC}
Q_{ADC}
414a
414b
PNI
PNQ
LONG PN
422
WALSH DECOVER ELEMENT
424
SYMBOL ACC
426
PILOT DEMOD
432
W_P
434
ACC
436
PILOT FILTER
PILOT
442
WALSH DECOVER ELEMENT
444
ACC
POWER CONTROL
450
SYMBOL COMBINER
452
DE-INT
460
DECODER

FIG. 4

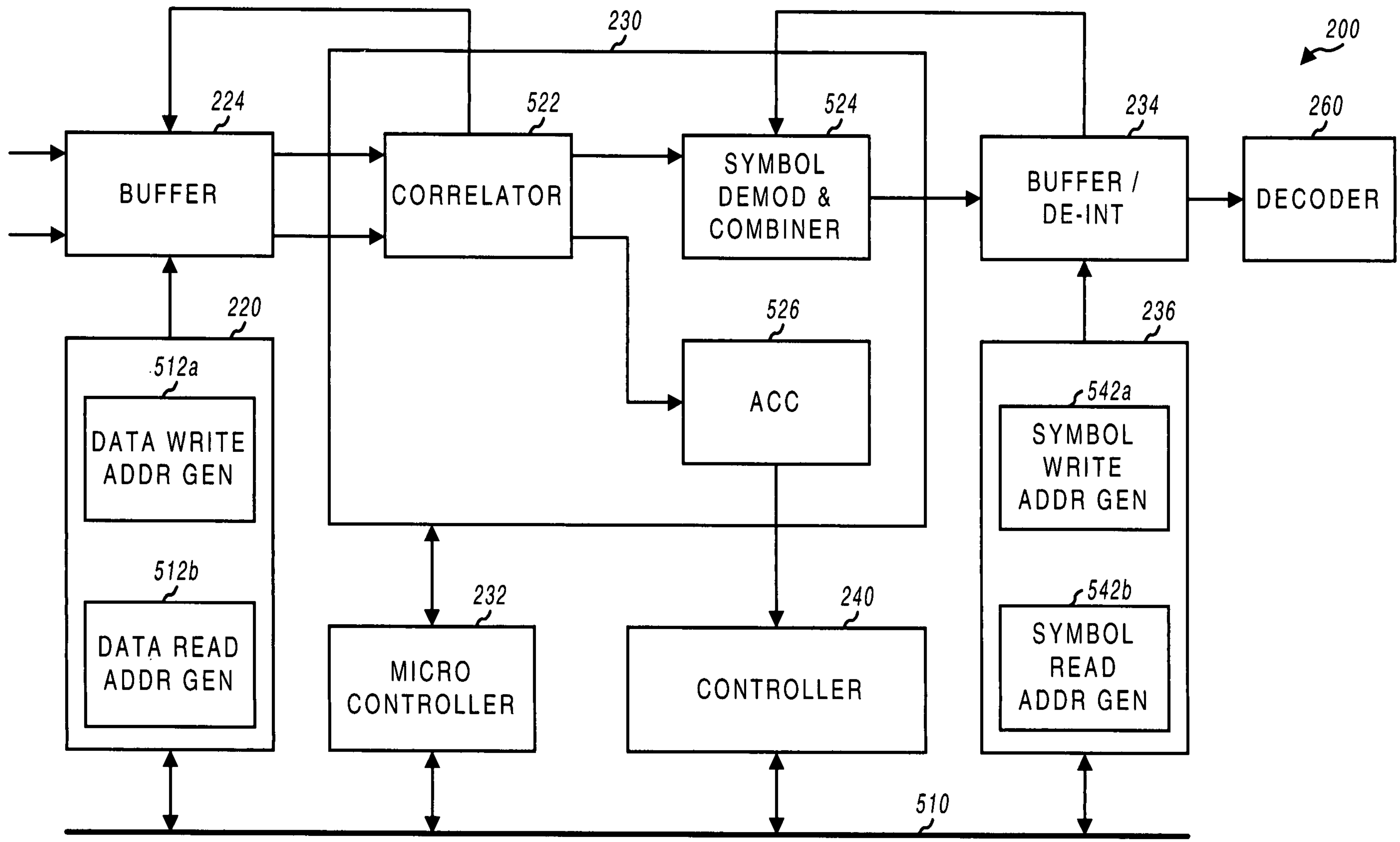
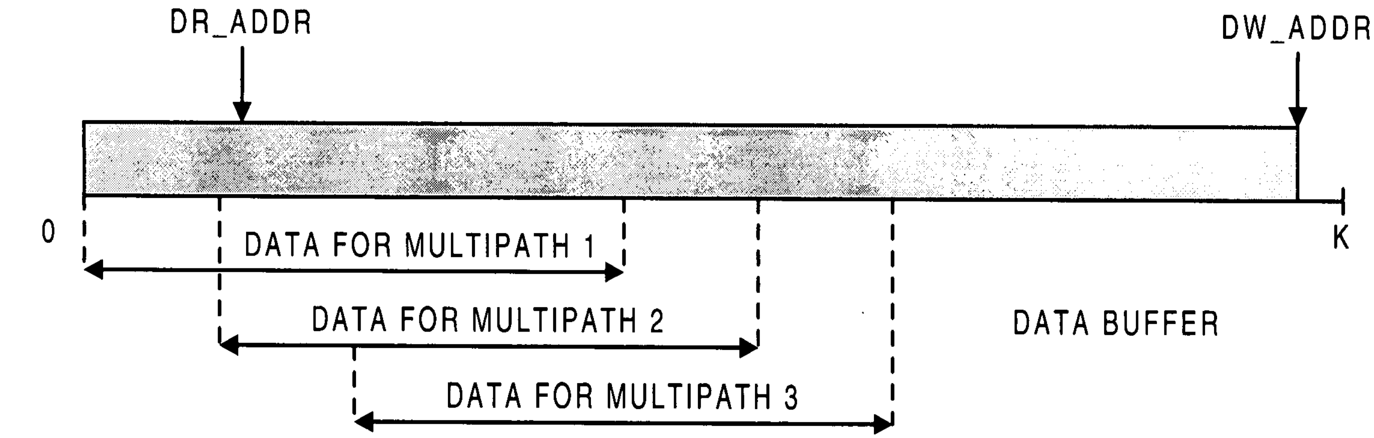
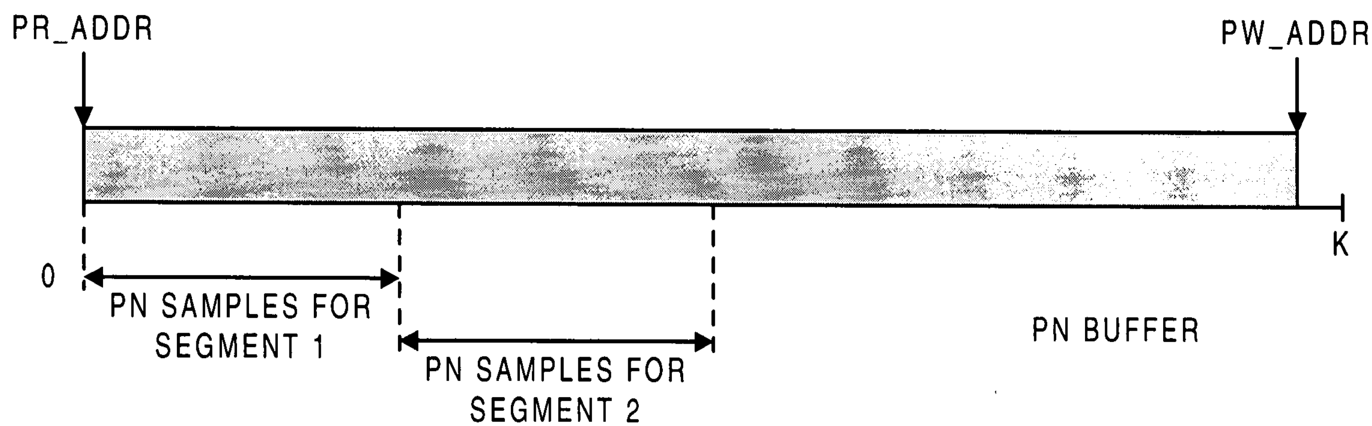

200
230
224
522
524
234
260
BUFFER
CORRELATOR
SYMBOL DEMOD & COMBINER
BUFFER / DE-INT
DECODER
220
526
236
512a
DATA WRITE ADDR GEN
ACC
542a
SYMBOL WRITE ADDR GEN
512b
DATA READ ADDR GEN
232
MICRO CONTROLLER
240
CONTROLLER
542b
SYMBOL READ ADDR GEN
510

FIG. 5



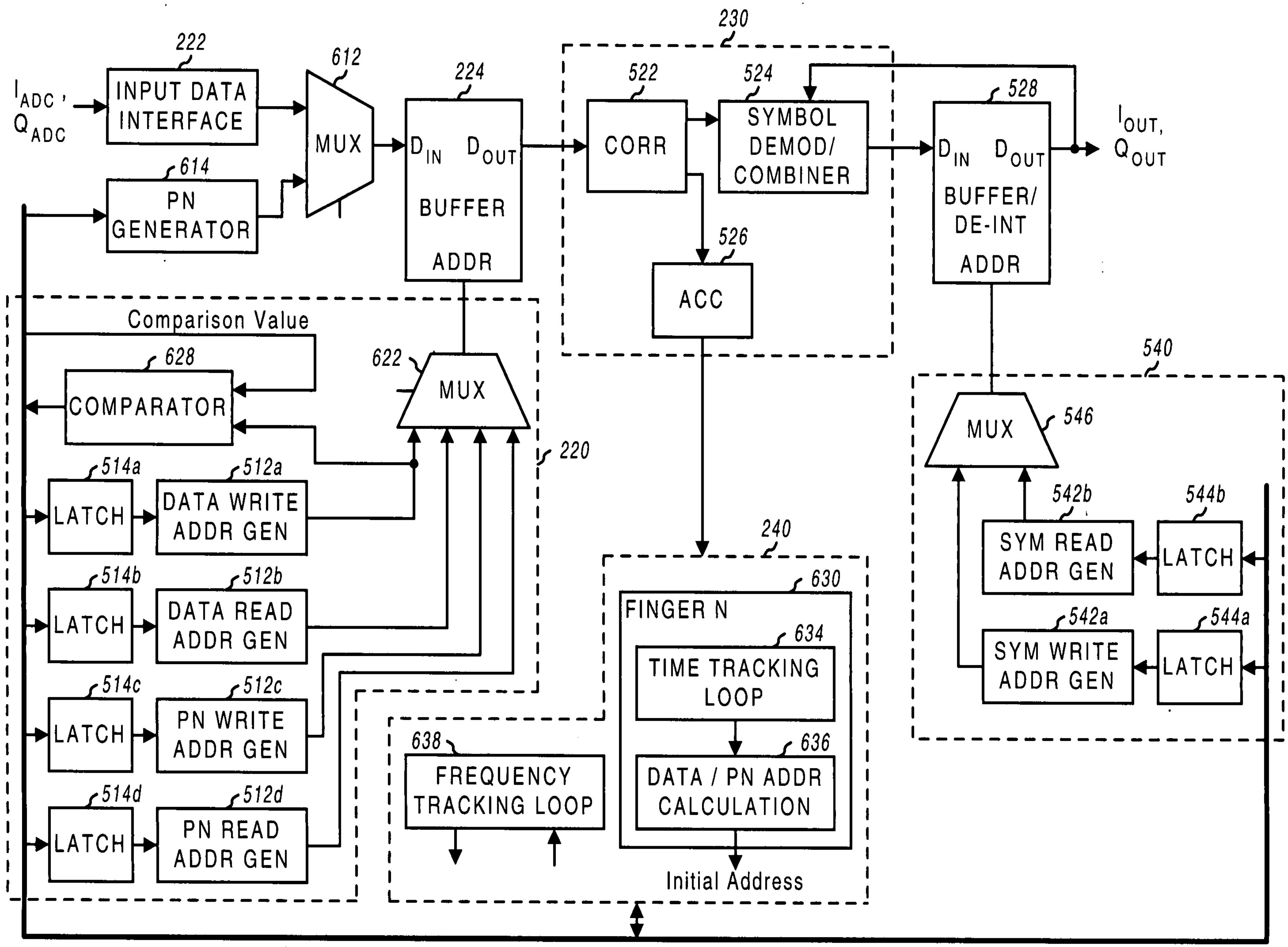
DR_ADDR
DW_ADDR
0
K
DATA FOR MULTIPATH 1
DATA FOR MULTIPATH 2
DATA FOR MULTIPATH 3
DATA BUFFER

FIG. 6A



PR_ADDR
PW_ADDR
0
K
PN SAMPLES FOR SEGMENT 1
PN SAMPLES FOR SEGMENT 2
PN BUFFER

FIG. 6B



I_ADC, Q_ADC
222
INPUT DATA INTERFACE
614
PN GENERATOR
612
MUX
224
D_IN D_OUT
BUFFER
ADDR
230
522
CORR
524
SYMBOL DEMOD/ COMBINER
526
ACC
528
D_IN D_OUT
BUFFER/ DE-INT
ADDR
I_OUT, Q_OUT
Comparison Value
628
COMPARATOR
622
MUX
220
514a
LATCH
512a
DATA WRITE ADDR GEN
514b
LATCH
512b
DATA READ ADDR GEN
514c
LATCH
512c
PN WRITE ADDR GEN
514d
LATCH
512d
PN READ ADDR GEN
240
630
FINGER N
634
TIME TRACKING LOOP
636
DATA / PN ADDR CALCULATION
Initial Address
638
FREQUENCY TRACKING LOOP
540
546
MUX
542b
SYM READ ADDR GEN
544b
LATCH
542a
SYM WRITE ADDR GEN
544a
LATCH

FIG. 6C

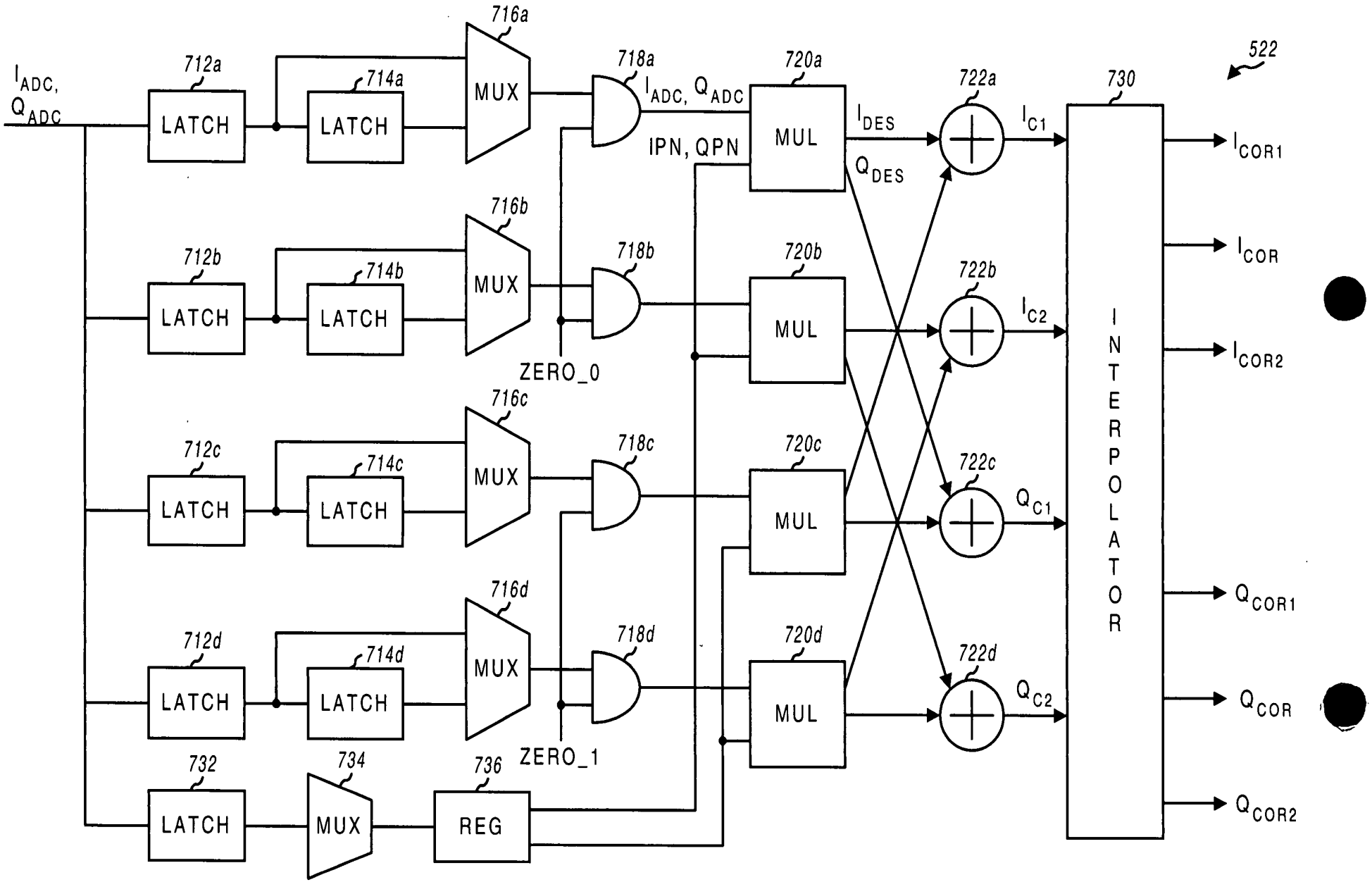

522
I_{ADC}, Q_{ADC}
712a
LATCH
714a
LATCH
716a
MUX
718a
I_{ADC}, Q_{ADC}
IPN, QPN
720a
MUL
I_{DES}
Q_{DES}
722a
I_{C1}
730
712b
LATCH
714b
LATCH
716b
MUX
718b
ZERO_0
720b
MUL
722b
I_{C2}
712c
LATCH
714c
LATCH
716c
MUX
718c
720c
MUL
722c
Q_{C1}
712d
LATCH
714d
LATCH
716d
MUX
718d
ZERO_1
720d
MUL
722d
Q_{C2}
732
LATCH
734
MUX
736
REG
INTERPOLATOR
I_{COR1}
I_{COR}
I_{COR2}
Q_{COR1}
Q_{COR}
Q_{COR2}

FIG. 7A

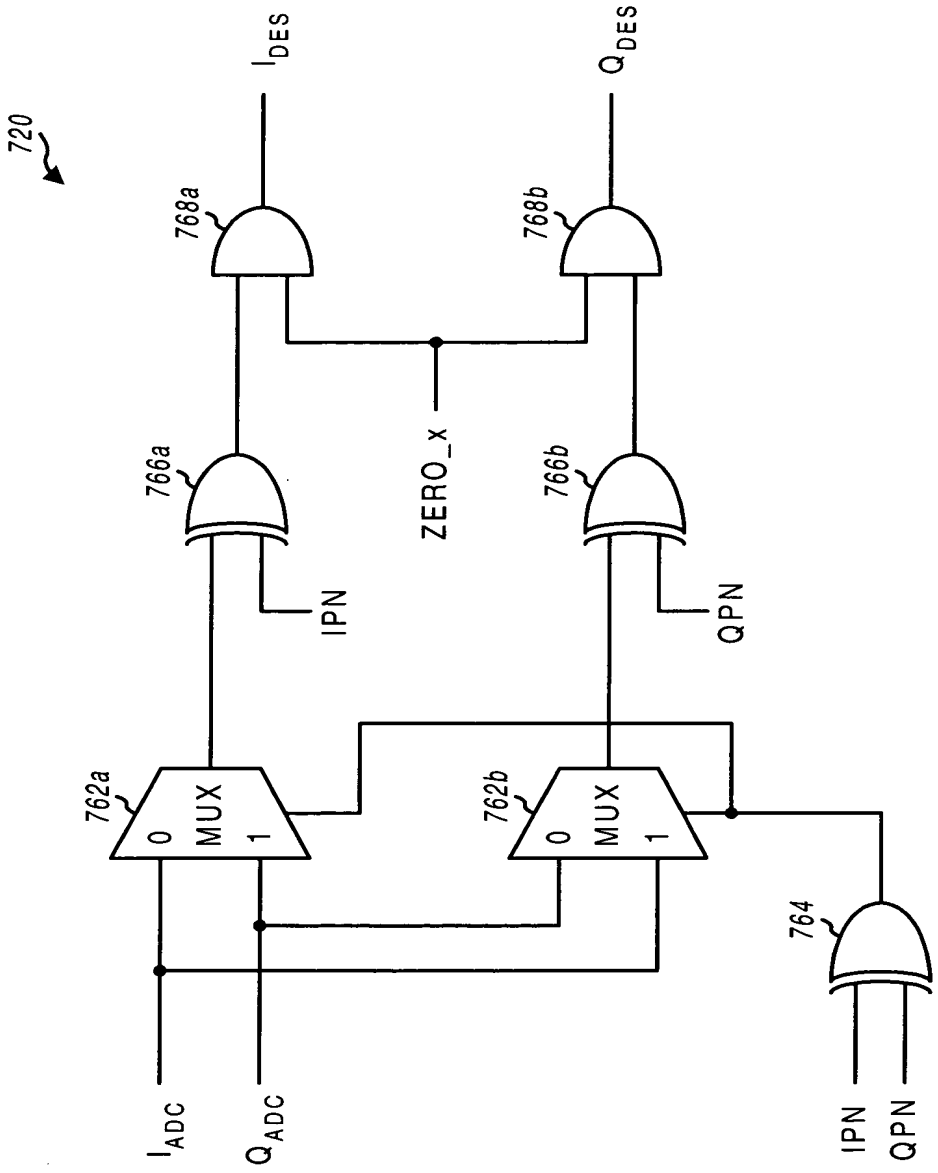
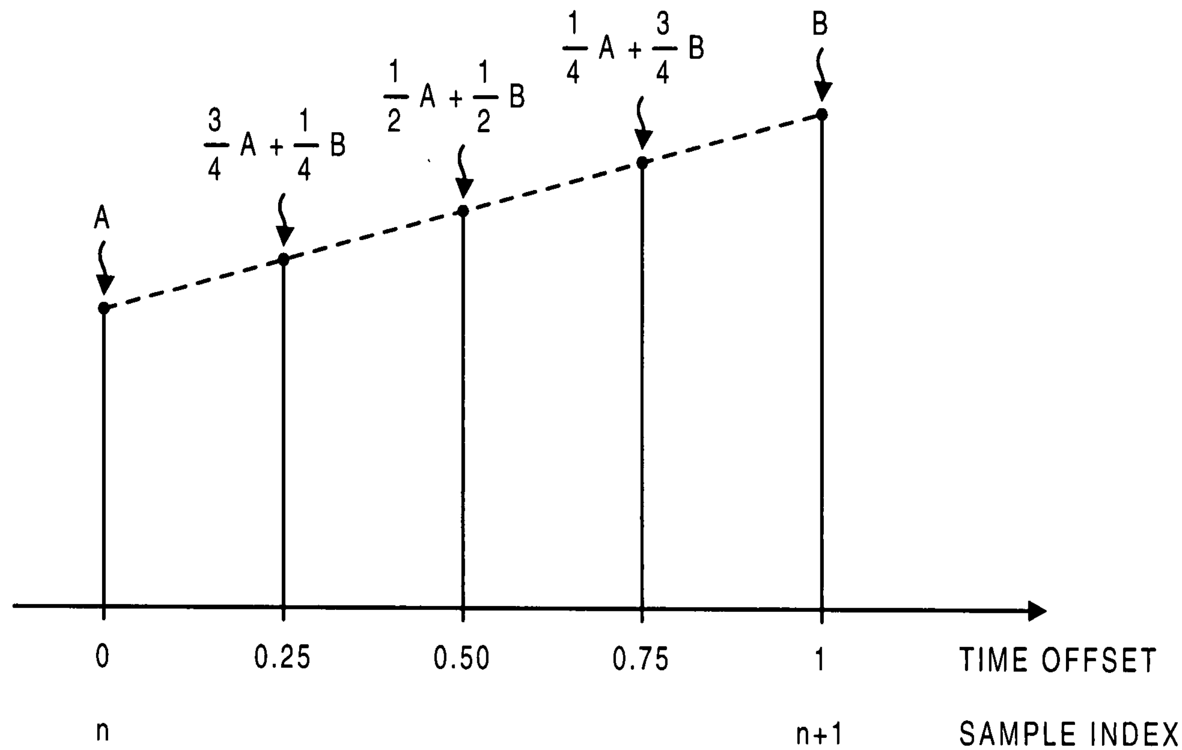

720
I_{DES}
Q_{DES}
768a
768b
766a
766b
ZERO_x
IPN
QPN
762a
762b
MUX
0
1
764
I_{ADC}
Q_{ADC}
IPN
QPN

FIG. 7B



A
$\frac{3}{4}$ A + $\frac{1}{4}$ B
$\frac{1}{2}$ A + $\frac{1}{2}$ B
$\frac{1}{4}$ A + $\frac{3}{4}$ B
B
0
0.25
0.50
0.75
1
TIME OFFSET
n
n+1
SAMPLE INDEX

FIG. 7C

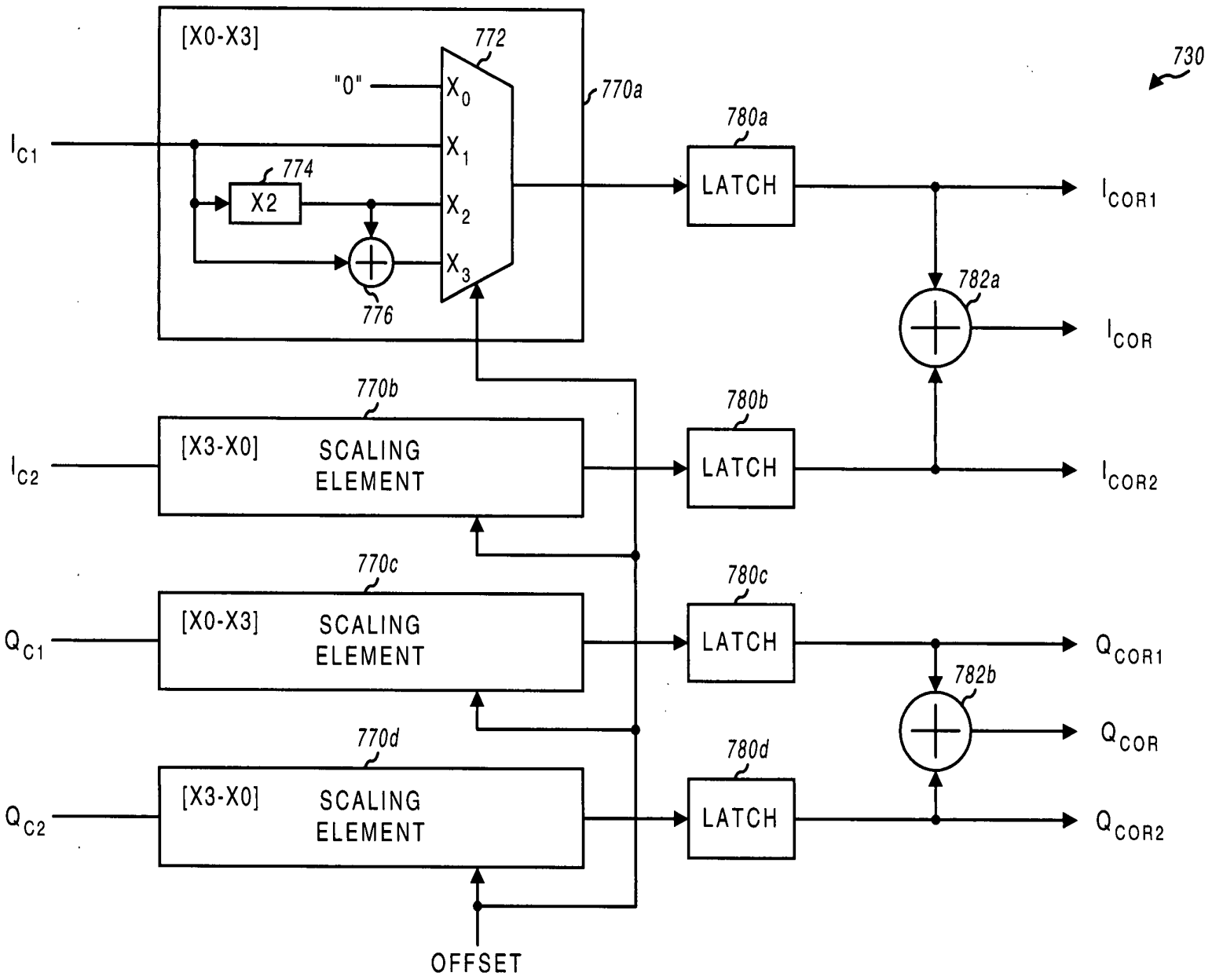

730
[X0-X3]
772
"0"
X_0
X_1
X_2
X_3
770a
I_{C1}
774
X2
776
780a
LATCH
I_{COR1}
782a
I_{COR}
770b
I_{C2}
[X3-X0]
SCALING ELEMENT
780b
LATCH
I_{COR2}
770c
Q_{C1}
[X0-X3]
SCALING ELEMENT
780c
LATCH
Q_{COR1}
782b
Q_{COR}
770d
Q_{C2}
[X3-X0]
SCALING ELEMENT
780d
LATCH
Q_{COR2}
OFFSET

FIG. 7D

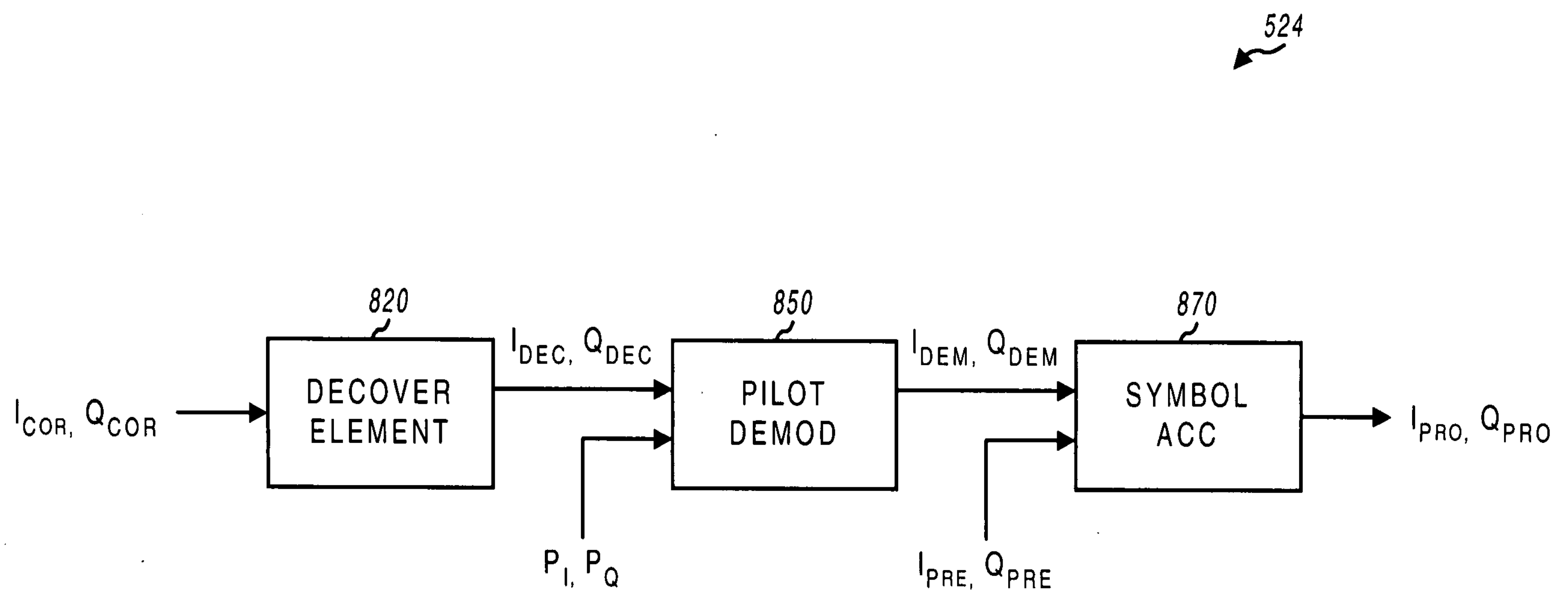

524
820
DECOVER ELEMENT
850
PILOT DEMOD
870
SYMBOL ACC
I_{COR}, Q_{COR}
I_{DEC}, Q_{DEC}
P_I, P_Q
I_{DEM}, Q_{DEM}
I_{PRE}, Q_{PRE}
I_{PRO}, Q_{PRO}

FIG. 8A

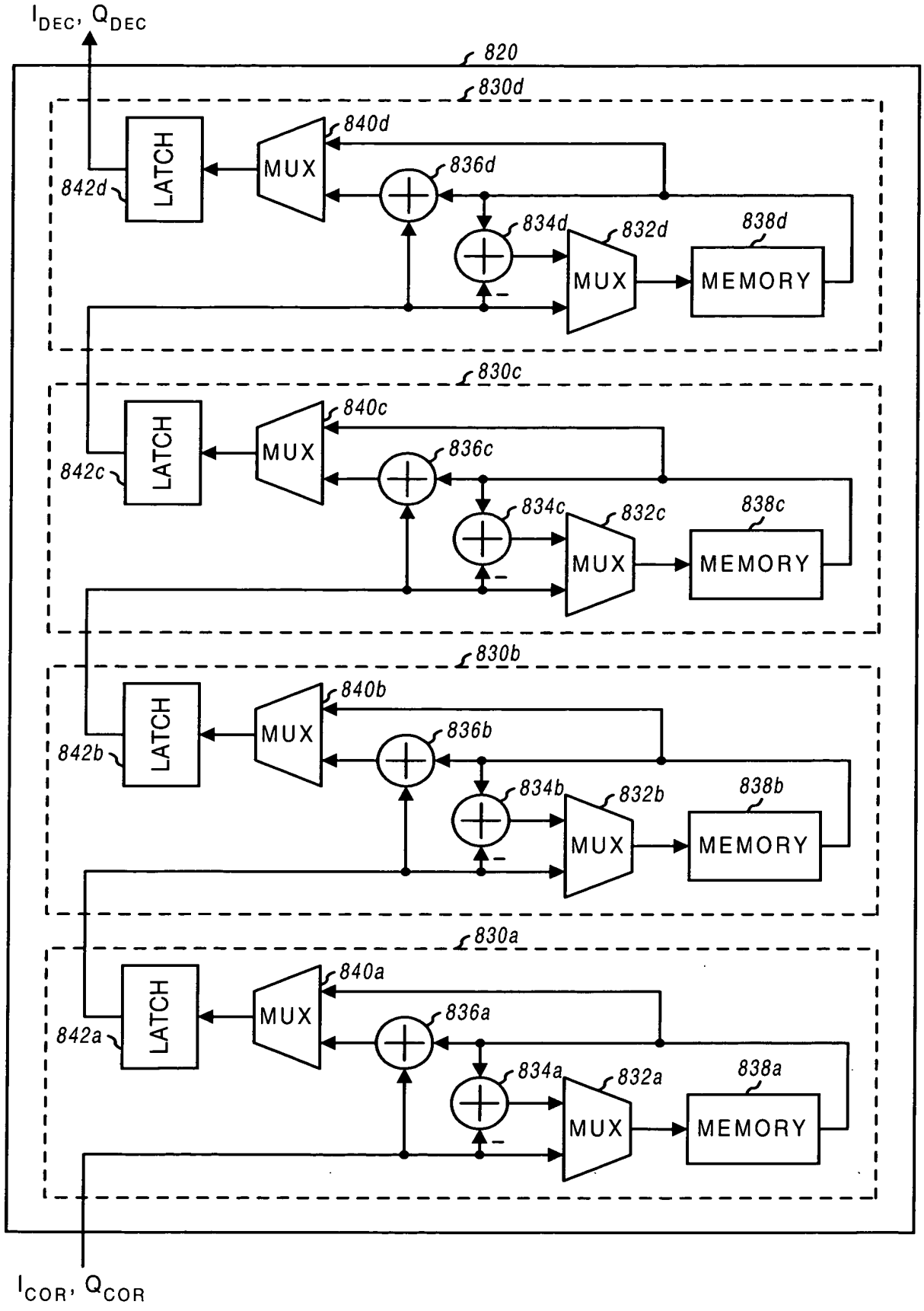

I_{DEC}, Q_{DEC}
820
830d
LATCH
842d
MUX
840d
836d
834d
832d
MUX
838d
MEMORY
830c
LATCH
842c
MUX
840c
836c
834c
832c
MUX
838c
MEMORY
830b
LATCH
842b
MUX
840b
836b
834b
832b
MUX
838b
MEMORY
830a
LATCH
842a
MUX
840a
836a
834a
832a
MUX
838a
MEMORY
I_{COR}, Q_{COR}

FIG. 8B

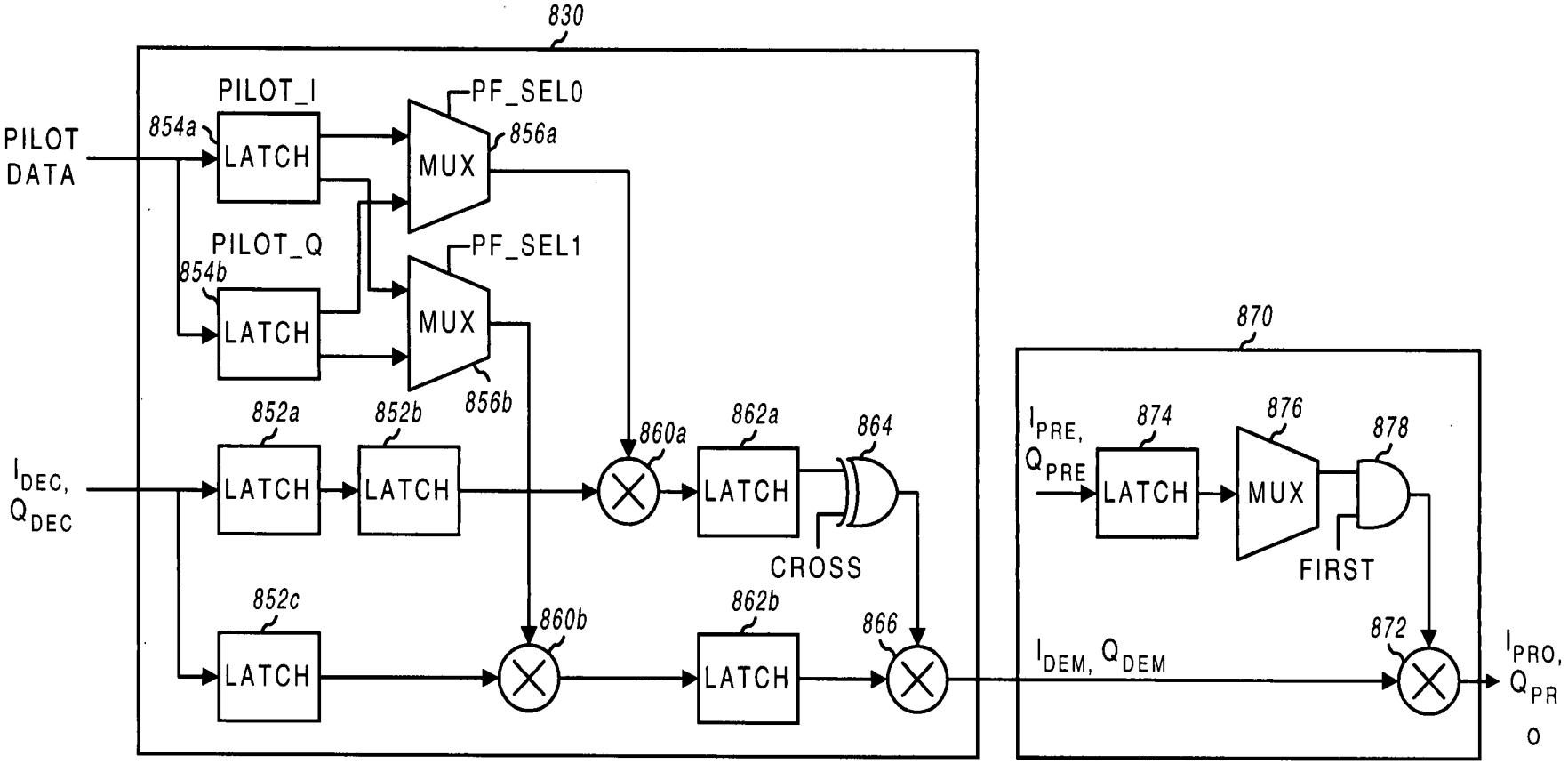

830
PILOT_I
PF_SEL0
PILOT DATA
854a
LATCH
MUX
856a
PILOT_Q
PF_SEL1
854b
LATCH
MUX
856b
852a
852b
860a
862a
864
I_{DEC}, Q_{DEC}
LATCH
LATCH
LATCH
CROSS
852c
860b
862b
866
LATCH
LATCH
870
I_{PRE}, Q_{PRE}
874
876
878
LATCH
MUX
FIRST
872
I_{DEM}, Q_{DEM}
I_{PRO}, Q_{PRO}

FIG. 8C

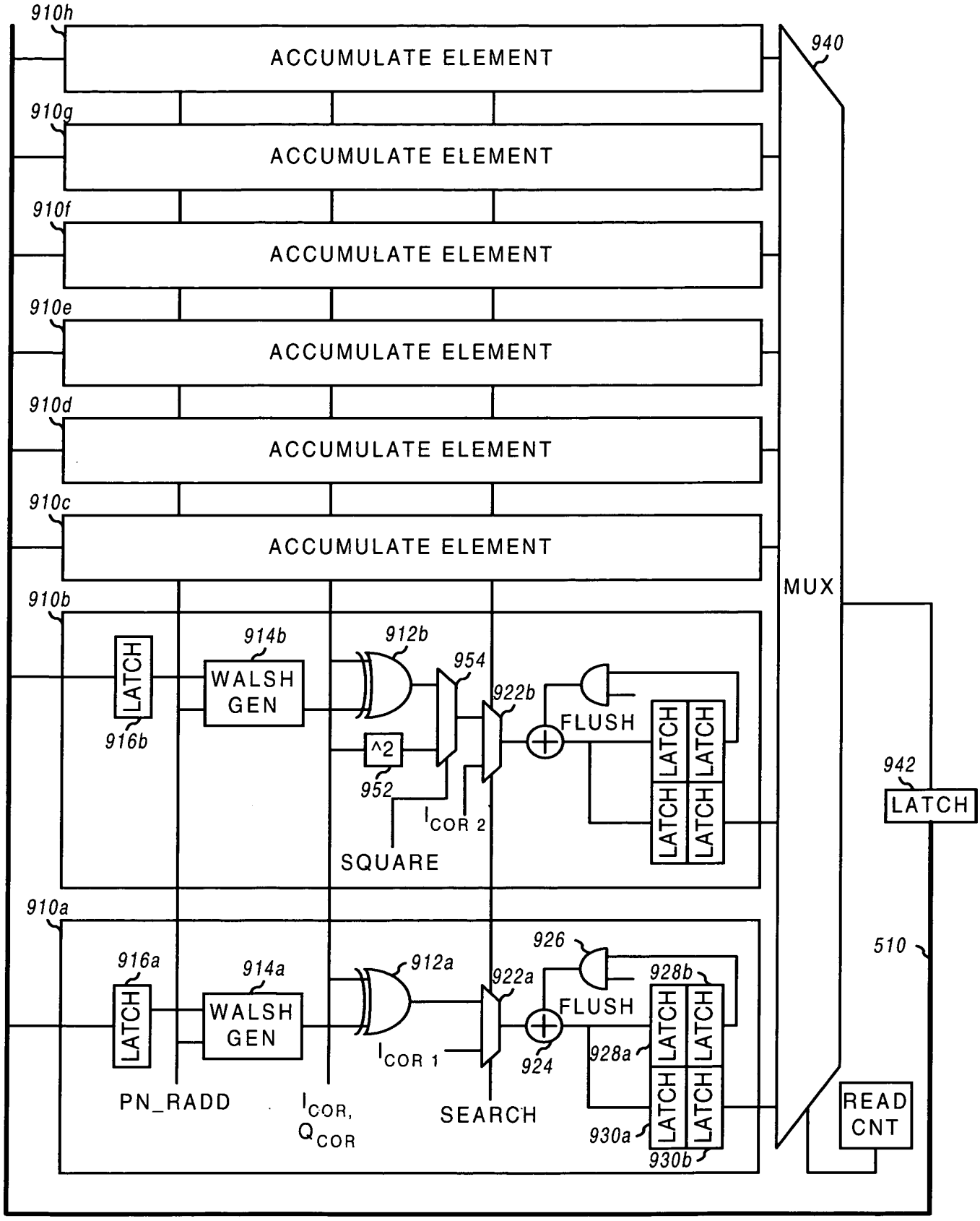

910h
ACCUMULATE ELEMENT
940
910g
ACCUMULATE ELEMENT
910f
ACCUMULATE ELEMENT
910e
ACCUMULATE ELEMENT
910d
ACCUMULATE ELEMENT
910c
ACCUMULATE ELEMENT
MUX
910b
LATCH
916b
914b
WALSH GEN
912b
954
922b
FLUSH
LATCH
LATCH
LATCH
LATCH
^2
952
I COR 2
SQUARE
942
LATCH
910a
916a
LATCH
914a
WALSH GEN
912a
922a
926
FLUSH
928b
928a
924
I COR 1
510
PN_RADD
I COR, Q COR
SEARCH
930a
930b
READ CNT

FIG. 9

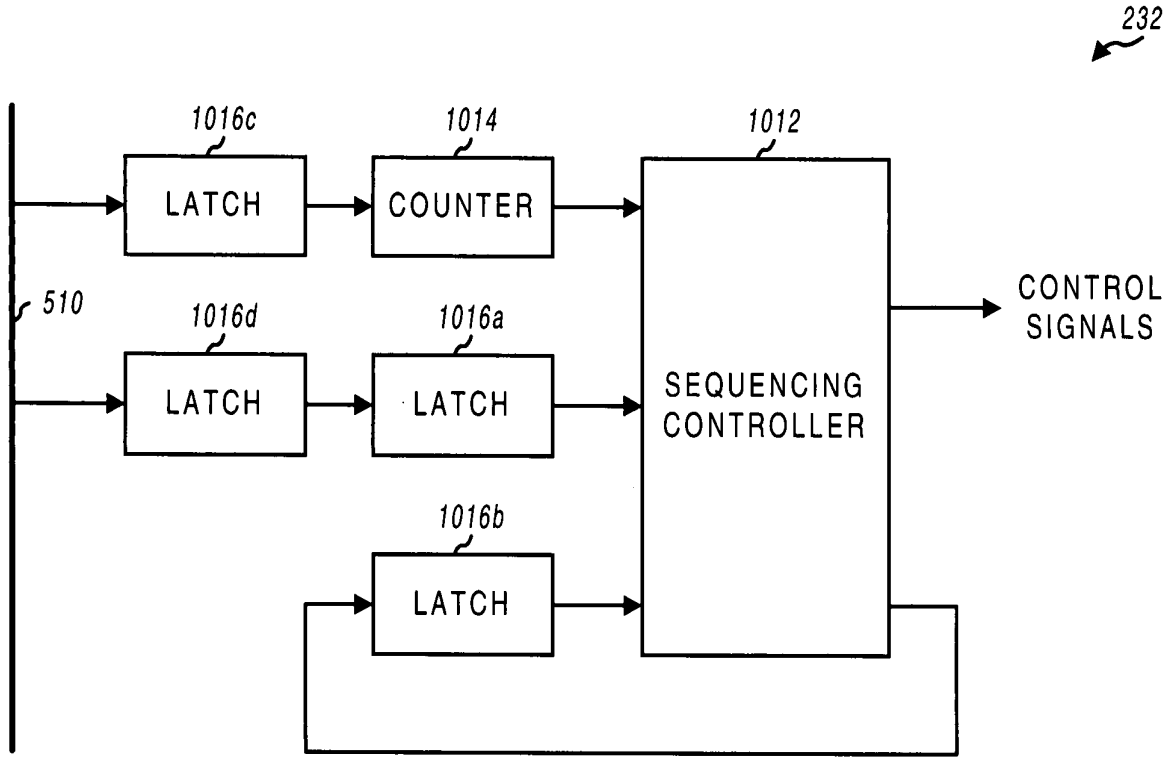


FIG. 10

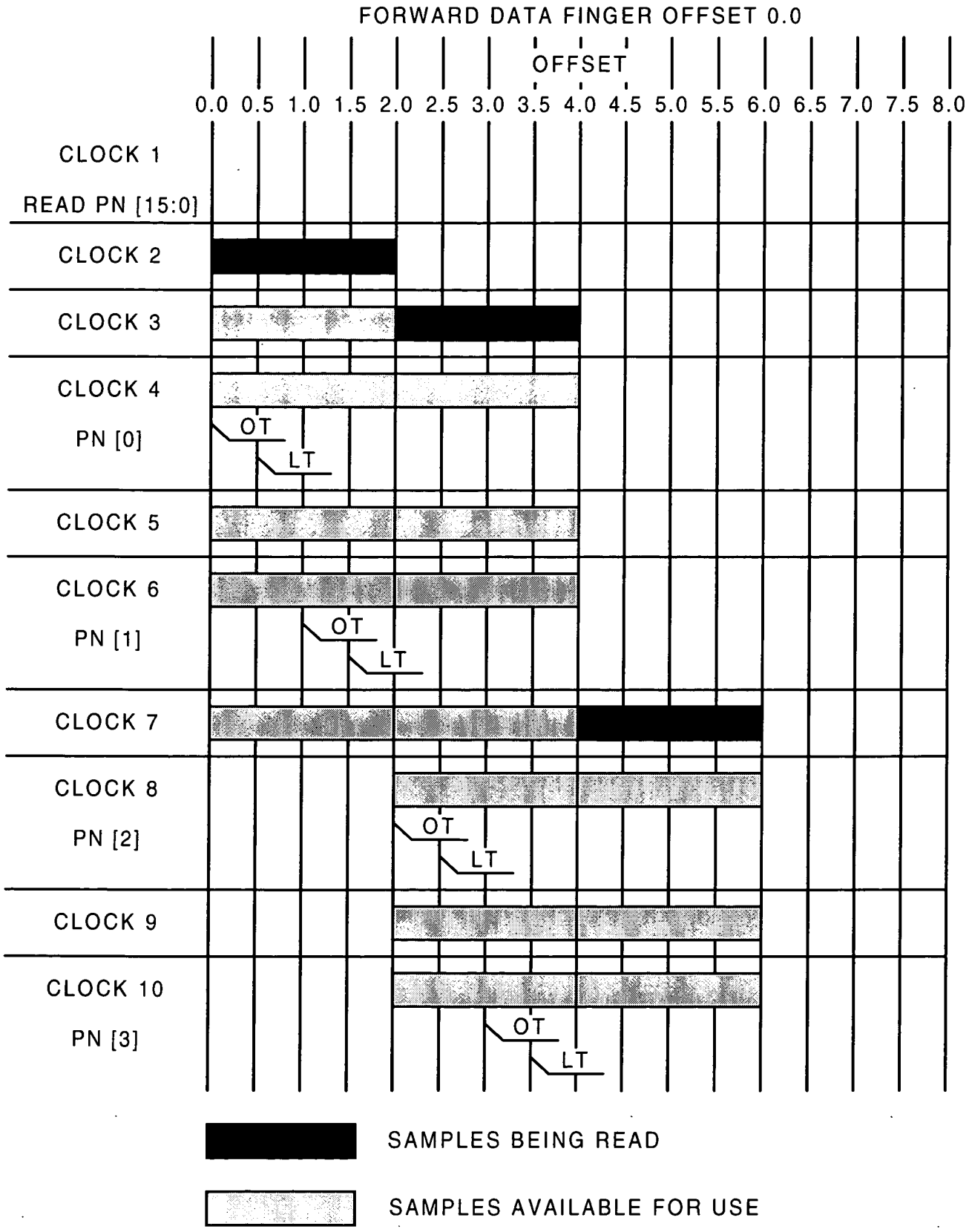

FORWARD DATA FINGER OFFSET 0.0
OFFSET
0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0
CLOCK 1
READ PN [15:0]
CLOCK 2
CLOCK 3
CLOCK 4
PN [0]
OT
LT
CLOCK 5
CLOCK 6
PN [1]
OT
LT
CLOCK 7
CLOCK 8
PN [2]
OT
LT
CLOCK 9
CLOCK 10
PN [3]
OT
LT
SAMPLES BEING READ
SAMPLES AVAILABLE FOR USE

FIG. 11A

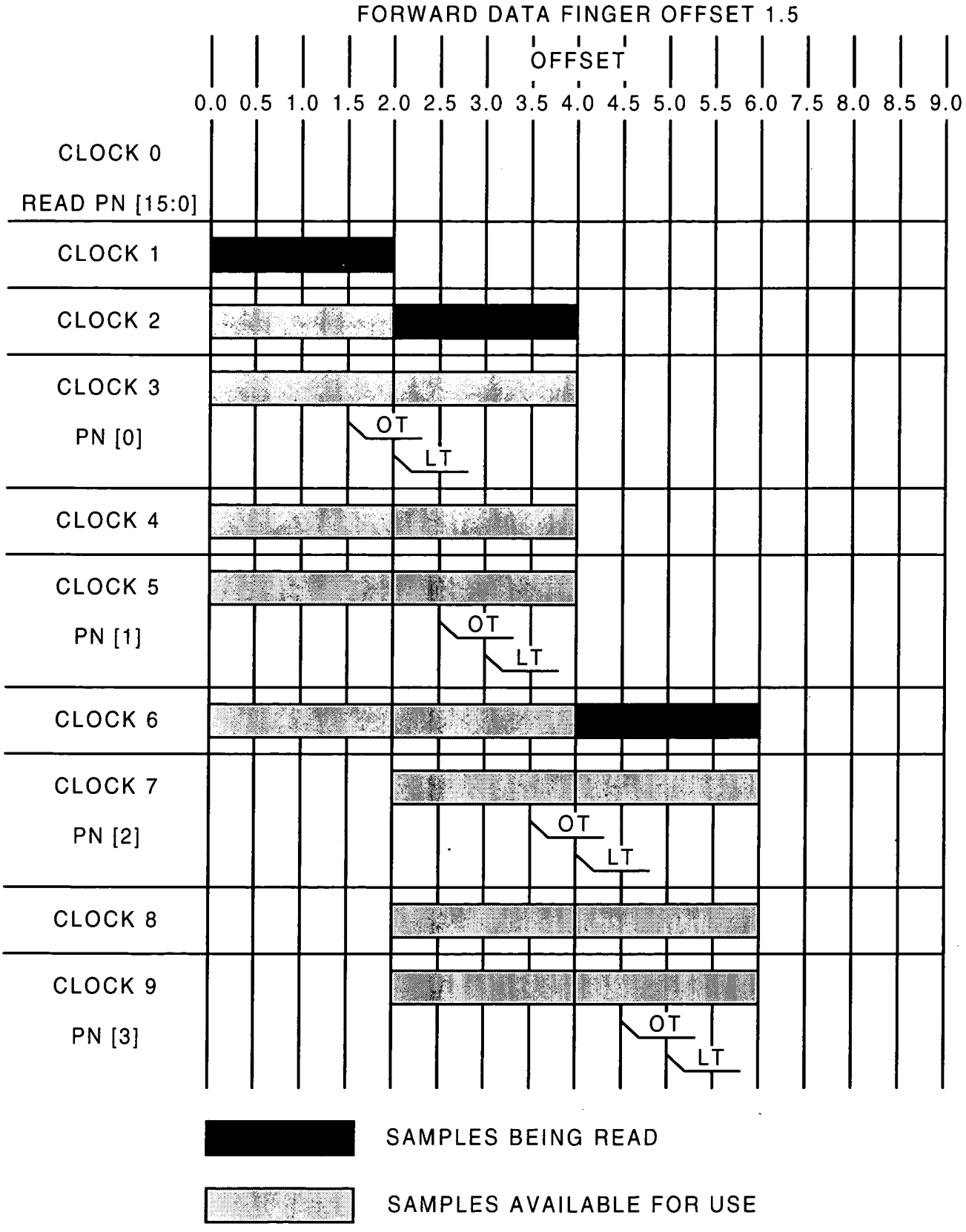

FORWARD DATA FINGER OFFSET 1.5
OFFSET
0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 7.5 8.0 8.5 9.0
CLOCK 0
READ PN [15:0]
CLOCK 1
CLOCK 2
CLOCK 3
PN [0]
OT
LT
CLOCK 4
CLOCK 5
PN [1]
OT
LT
CLOCK 6
CLOCK 7
PN [2]
OT
LT
CLOCK 8
CLOCK 9
PN [3]
OT
LT
SAMPLES BEING READ
SAMPLES AVAILABLE FOR USE

FIG. 11B